

Title (en)  
7-PIPERIDINOALKYL-3,4-DIHYDROQUINOLONE DERIVATIVE

Title (de)  
7-PIPERIDINALKYL-3,4-DIHYDROCHINOLON-DERIVAT

Title (fr)  
DÉRIVÉ DE 7-PIPÉRIDINOALKYLE-3,4-DIHYDROQUINOLONE

Publication  
**EP 2344471 A4 20120530 (EN)**

Application  
**EP 09817928 A 20090930**

Priority  
• JP 2009067441 W 20090930  
• JP 2008257072 A 20081002

Abstract (en)  
[origin: WO2010038901A1] To provide a novel compound, a pharmaceutically acceptable salt or a hydrate thereof useful for preventing or treating for depression, anxiety disorders (such as generalized anxiety disorder, posttraumatic stress disorder, panic disorder, obsessive-compulsive disorder or social anxiety disorder), attention deficit disorder, mania, manic-depressive illness, schizophrenia, mood disorders, stress, sleep disorders, attacks, memory impairment, cognitive impairment, dementia, amnesia, delirium, obesity, eating disorder, appetite disorder, hyperphagia, bulimia, cibophobia, diabetes, cardiovascular diseases, hypertension, dyslipidemia, myocardial infarction, movement disorder (such as Parkinson's disease, epilepsy, convulsion or tremor), drug abuse, drug addiction or sexual dysfunction, based on a melanin-concentrating hormone receptor (MCH receptor) antagonistic action. SOLUTION A compound, a pharmaceutically acceptable salt or a hydrate thereof represented by the formula (I).

IPC 8 full level  
**C07D 401/06** (2006.01); **A61K 31/4709** (2006.01); **A61P 1/14** (2006.01); **A61P 3/04** (2006.01); **A61P 3/06** (2006.01); **A61P 3/10** (2006.01); **A61P 9/10** (2006.01); **A61P 9/12** (2006.01); **A61P 15/10** (2006.01); **A61P 25/00** (2006.01); **A61P 25/02** (2006.01); **A61P 25/08** (2006.01); **A61P 25/18** (2006.01); **A61P 25/20** (2006.01); **A61P 25/22** (2006.01); **A61P 25/24** (2006.01); **A61P 25/28** (2006.01); **A61P 25/36** (2006.01); **A61P 43/00** (2006.01); **C07D 401/14** (2006.01)

CPC (source: EP KR US)  
**A61K 31/4709** (2013.01 - KR); **A61P 1/00** (2018.01 - EP); **A61P 1/14** (2018.01 - EP); **A61P 3/00** (2018.01 - EP); **A61P 3/04** (2018.01 - EP); **A61P 3/06** (2018.01 - EP); **A61P 3/10** (2018.01 - EP); **A61P 9/00** (2018.01 - EP); **A61P 9/02** (2018.01 - EP); **A61P 9/10** (2018.01 - EP); **A61P 9/12** (2018.01 - EP); **A61P 15/00** (2018.01 - EP); **A61P 15/10** (2018.01 - EP); **A61P 25/00** (2018.01 - EP); **A61P 25/02** (2018.01 - EP); **A61P 25/08** (2018.01 - EP); **A61P 25/10** (2018.01 - EP); **A61P 25/12** (2018.01 - EP); **A61P 25/16** (2018.01 - EP); **A61P 25/18** (2018.01 - EP); **A61P 25/20** (2018.01 - EP); **A61P 25/22** (2018.01 - EP); **A61P 25/24** (2018.01 - EP); **A61P 25/28** (2018.01 - EP); **A61P 25/30** (2018.01 - EP); **A61P 25/36** (2018.01 - EP); **A61P 43/00** (2018.01 - EP); **C07D 401/06** (2013.01 - EP KR US); **C07D 401/14** (2013.01 - EP KR US)

Citation (search report)  
[A] KIM N ET AL: "Identification of substituted 4-aminopiperidines and 3-aminopyrrolidines as potent MCH-R1 antagonists for the treatment of obesity", BIOORGANIC & MEDICINAL CHEMISTRY LETTERS, PERGAMON, ELSEVIER SCIENCE, GB, vol. 16, no. 20, 15 October 2006 (2006-10-15), pages 5445 - 5450, XP025107191, ISSN: 0960-894X, [retrieved on 20061015], DOI: 10.1016/J.BMCL.2006.07.053

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AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

Designated extension state (EPC)  
AL BA RS

DOCDB simple family (publication)  
**WO 2010038901 A1 20100408**; AR 073727 A1 20101124; AU 2009300607 A1 20100408; AU 2009300607 B2 20140227; AU 2009300607 C1 20140807; BR PI0925343 A2 20150728; CA 2739513 A1 20100408; CL 2011000734 A1 20110923; CN 102239159 A 20111109; CN 102239159 B 20140625; CO 6321164 A2 20110920; CY 1114165 T1 20160831; DK 2344471 T3 20131007; EP 2344471 A1 20110720; EP 2344471 A4 20120530; EP 2344471 B1 20130724; ES 2424393 T3 20131001; HK 1159622 A1 20120803; HR P20130728 T1 20131011; IL 212070 A0 20110630; IL 212070 A 20140731; JP 2012504549 A 20120223; JP 5541279 B2 20140709; KR 20110067026 A 20110620; MX 2011003500 A 20110502; MY 154337 A 20150529; NZ 592008 A 20111222; PE 20110410 A1 20110702; PL 2344471 T3 20131231; PT 2344471 E 20130801; RS 52964 B 20140228; RU 2011117161 A 20121110; RU 2498981 C2 20131120; SI 2344471 T1 20131129; UA 105187 C2 20140425; US 2011178304 A1 20110721; US 8461182 B2 20130611; ZA 201102315 B 20120627

DOCDB simple family (application)  
**JP 2009067441 W 20090930**; AR P090103798 A 20091001; AU 2009300607 A 20090930; BR PI0925343 A 20090930; CA 2739513 A 20090930; CL 2011000734 A 20110401; CN 200980149091 A 20090930; CO 11038711 A 20110330; CY 131100633 T 20130725; DK 09817928 T 20090930; EP 09817928 A 20090930; ES 09817928 T 20090930; HK 12100046 A 20120104; HR P20130728 T 20130801; IL 21207011 A 20110331; JP 2011513768 A 20090930; KR 20117007343 A 20090930; MX 2011003500 A 20090930; MY PI20111430 A 20090930; NZ 59200809 A 20090930; PE 2011000810 A 20090930; PL 09817928 T 20090930; PT 09817928 T 20090930; RS P20130370 A 20090930; RU 2011117161 A 20090930; SI 200930738 T 20090930; UA A201105428 A 20090930; US 200913122281 A 20090930; ZA 201102315 A 20110329